Claims

[c1]   What is claimed is:

1.A method for processing an image in a video data, the video data comprising at least a first frame and a second frame, the first frame composed of a first even field and a first odd field, the second frame composed of a second even field and a second odd field, the method comprising:

obtaining a first difference set between pixel information of the first frame and pixel information of the second frame, wherein the first frame and the second frame are adjacent to each other;

examining a first criterion with the first difference set; and

performing cross color suppressing operation on pixel information of the second frame according to a set of stationary image judgment information comprising the result of the first criterion examination.

[c2]   2.The method of claim 1, wherein the first difference set comprises a difference between pixel information of a target pixel in the first frame and pixel information of a corresponding pixel of the target pixel in the second

frame.

[c3]   3.The method of claim 2, wherein the target pixel is in the first even field and the corresponding pixel of the target pixel is in the second even field.

[c4]   4.The method of claim 2, wherein the target pixel is in the first odd field and the corresponding pixel of the target pixel is in the second odd field.

[c5]   5.The method of claim 2, wherein the target pixel is in the first odd field and the corresponding pixel of the target pixel is in the second even field.

[c6]   6.The method of claim 2, wherein the first difference set further comprises a plurality of differences, each between pixel information of one of a plurality of pixels in the vicinity of the target pixel and pixel information of a corresponding pixel in the second frame, respectively.

[c7]   7.The method of claim 1, wherein the first criterion comprises a comparison between a difference in the first difference set and a first threshold value.

[c8]   8.The method of claim 1, wherein the method further comprises:
obtaining a second difference set between pixel information of an even field and an odd field of the same

frame; and

examining a second criterion with the second difference set;

wherein the set of stationary image judgment information further comprising the result of the second criterion examination.

[c9]   9.The method of claim 8, wherein the even field involving the second difference set is the first even field, the odd field involving the second difference set is the first odd field.

[c10]   10.The method of claim 8, wherein the even field involving the second difference set is the second even field, the odd field involving the second difference set is the second odd field.

[c11]   11.The method of claim 8, wherein the second difference set comprises a difference between pixel information of a target pixel in the even field involving the second difference set and pixel information of a corresponding pixel in the odd field involving the second difference set.

[c12]   12.The method of claim 11, wherein the second difference set further comprises a plurality of differences, each between pixel information of one of a plurality of pixels in the vicinity of the target pixel and pixel infor-

mation of a corresponding pixel in the odd field involving the second difference set, respectively.

[c13] 13. The method of claim 8, wherein the second criterion comprises a comparison between a difference in the second difference set and a second threshold value.

[c14] 14. The method of claim 1, wherein the method further comprises:

obtaining a third difference set comprising a difference between pixel information of a target pixel in one of the two frames and pixel information of the pixel at the top of the target pixel, and a difference between pixel information of the target pixel and pixel information of the pixel at the bottom of the target pixel; and

examining a third criterion with the third difference set; wherein the set of stationary image judgment information further comprising the result of the third criterion examination.

[c15] 15. The method of claim 1, wherein the method further comprises:

obtaining a fifth difference set comprising a difference between pixel information of a target pixel in one of the two frames and pixel information of a pixel in the other of the two frames corresponding to the pixel at the top of the target pixel, and a difference between pixel infor-

mation of the target pixel and pixel information of a pixel in the other of the two frames corresponding to the pixel at the bottom of the target pixel; and examining a fifth criterion with the fifth difference set; wherein the set of stationary image judgment information further comprising the result of the fifth criterion examination.

[c16] 16.The method of claim 1, wherein the cross color suppressing operation comprises averaging pixel information of the first frame and pixel information of the second frame.

[c17] 17.The method of claim 1, further comprising: performing cross luminance suppressing operation on pixel information of the second frame according to the set of stationary image judgment information.

[c18] 18.The method of claim 17, wherein the cross luminance suppression operation comprises averaging pixel information of the first frame and pixel information of the second frame.

[c19] 19.The method of claim 1, wherein the pixel information comprises luminance information.

[c20] 20.The method of claim 1, wherein the pixel information comprises chrominance information.